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ABSTRACT

A study investigated the study strategies used by 450 native Cantonese-speaking distance education students in Hong Kong/Macau studying in English, and the correlation between language skill levels and study approaches used. Students were surveyed concerning study motives and strategies, demographic information, langbuage use patterns, and self-reported command of English, in terms of both educational experience and skills for using various study methods. All participants used Cantonese at home but English at school. Most felt their English was insufficient or barely sufficient for many study activities (writing essays, tutorial discussion, telephone discussions with tutors). Older students and those with higher qualifications rated their skills higher. Overall, results indicate that command of English is related to the study approaches and skills likely to lead to academic success and persistence. Additional study skill instruction for students studying in a second language is recommended. Some examples of this approach are described. (MSE)

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Study approaches of distance learning students, studying in a second language

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ABSTRACT

The study approaches developed, as children, in school may not be appropriate for adults studying distance education courses. Distance learning differs from conventional education in that students must study independently from multi media course materials. Students studying in a second language may face additional study problems. There are likely to be increasing numbers of such students in the next century, if distance learning is to play a major part in educational world development. Hence consideration should be given to the needs of these students for developing appropriate approaches to study at a distance.

This paper investigates the study approaches (processes and study skills) of a large sample of Cantonese speaking students in the Hong Kong / Macau region. They were studying undergraduate distance learning courses, with English as the medium of instruction, at the East Asian Open Institute. Study approaches were measured by the widely used Biggs' Study process Questionnaire (SPQ) and an additional student information sheet was used to ascertain students' English language qualifications and how they rated their own English competency and study skills in various aspects of their studies. The sample includes adult students of all ages and at all stages of their study of "open entry" degree programmes.

This paper builds on earlier work using the SPQ analysis of study approaches. It investigates the relationship between students' competency in the English language and the way they approach their studies and rate their own study skills.

The paper then discusses to what extent the study processes and skills needed by these adults are developed in the academic distance learning courses offered to them.

INTRODUCTION

There have been some studies of student approaches to study in conventional higher education in the Hong Kong area, many using the Biggs Study Process Questionnaire (SPQ) analysis, e.g. Biggs(1), Stokes et al. (2),Gow & Kember (3). Some initial international studies of distance learning student's approaches to study, e.g. Kember and Harper(4), show that this type of analysis is also relevant to distance education, but there has been only a limited research in Hong Kong on distance education students' study approaches. Kember et al.(5) develop a distance

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education student progress instrument based upon Ramsden and Entwistle's(6) Approaches to Study Inventory and Ekins (7) investigated correlations between three measures of success : persistence (within the system); number of credits gained; and grades achieved in relation to the SPQ analysis of study motivation and strategy.

This paper builds upon this previous work using a sample of over four hundred Cantonese speaking distance learning students from Hong Kong / Macau, studying undergraduate distance learning courses in the medium of English at the East Asian Open Institute (EAOI). In particular it focuses the motivation and strategies of these students, as measured by Biggs' Study Process Questionnaire (8). It also builds upon the earlier work of the author(9 &10) on the study skills needed for the successful distance learner, using multi media courses.

THE METHOLOGY

This project uses the Study Process Questionnaire (SPQ), which is based upon Biggs' information processing model of learning (11), which identifies three dimensions for both students' motives for study and for their study strategies. These dimensions are: surface, deep and achieving. The SPQ and a related LPQ (for younger students) has been used extensively in many parts of the world e.g. the Philippines Watkins et al.(12) and Australia, Watkins (13). Prof John Biggs (14) and Stokes et al.(2) used it in Hong Kong with full time tertiary students, in a bilingual form (English and Chinese). This bilingual form was used in the current study along with a short information sheet for student details, a self assessment of study skills, qualifications and competency in the English language.

Study Process Questionnaire

The SPQ consists of statements for each of the dimensions of motive and strategy, which students were asked to rate on the scale of 1 to 5 given in Table 1.

Table 1: SPQ scale for responses

1	this item is never or rarely true of me
2	this item is sometimes true of me
3	this item is true of me about half the time
4	this item is frequently true of me
5	this item is always or almost always true of me.

Each dimension is measured by a set of seven questions, the responses to which are added to give a score for each student between 7 and 35 . A score of 21 being equivalent to a student giving a response of 3 (this item is true of me about half the time) to each item in the set. The questions for each set are interspersed within the questionnaire. Brief descriptions of these dimensions of motive and strategy are given below, together with examples of relevant statements from the SPQ.

Student motives for study

"Surface motive" (SM) is very much extrinsic motivation, e.g. "I chose my present courses largely with a view to the job situation when I graduate, rather than because of how much they interest me." and "I almost resent having to spend a further three or four years studying after leaving school, but feel that the end results will be worthwhile". Surface motivation includes being motivated by results rather e.g. marks, rather than personal development: "I am discouraged by a poor mark on a test and worry about how I will do on the next test".

By contrast "deep motive" (DM) is very much intrinsic motivation e.g. "I find that studying gives me a feeling of deep personal satisfaction" and "I find that studying academic topics can be as exciting as a good novel or movie. This motivation for study includes a search for self fulfilment and a philosophy of life: "I believe strongly that my main aim in life is to discover my own philosophy and belief system and to act in accordance with it".

"Achieving motive" (AM) is a desire to excel and to do well in life e.g. "I have a strong desire to excel in all my studies" and "I would see myself basically as an ambitious person and want to get to the top, whatever I do". It includes a view of life as a competition to win e.g. "I see getting high grades as a kind of competitive game, and I play to win".

Student study strategies

"Surface strategy" (SS) aims to avoid failure, but not to do more work than necessary, e.g. "I restrict my study to what is specifically set as I think it is unnecessary to do anything extra" or "I think browsing around is a waste of time, so I only study seriously what's given out in class or course outlines" . It includes an unquestioning acceptance of what is taught and learning it by rote, e.g. "I find it best to accept statements and ideas from my teachers/lecturers and question them only under exceptional circumstances" and "I learn some things by rote going over and over them until I know them by heart".

"Deep strategy" (DS) involves aiming for a good overall understanding and relating it to one's own experience, e.g. "While I am studying, I think of real life situations to which the material I am learning would be useful", "I try to relate new material, as I am reading it, to what I already know on that topic" and "I find that I have to do enough work on a topic so that I can form my own point of view before I am satisfied". This strategy involves following topics of interest and relating them to other subject areas e.g. "I find most new topics interesting and spend time trying to obtain more information about them" and "I try to relate what I have learnt in one subject to that in another".

"Achieving strategy" (AS) involves being hard working and well organised in order to achieve good grades, e.g. "I try to work consistently throughout the term and review regularly when exams are close", "I try to do all of my assignments as soon as possible after they are given out" and "I keep neat well-organised notes for most subjects".

Student details

The information sheet requested student's date of birth, student number, degree programme (BA,BBA, or BSc), number of credits gained at different levels and the grades they usually obtained. A small sample of this data was double checked against EAOI student records and found to be accurate.

Command of English

The information sheet also asked for students' highest English language qualification and students were asked how frequently they translated what they read in English back into their own language in order to understand it better. They were asked about the languages spoken at home and in tutorials. Only students who said that they always spoke Cantonese at home were selected for this study. So this study is based upon students who said that they always spoke Cantonese at home, but who are studying courses written in the English language.

Students were asked to rate their own command of the English language on a five point scale, given in Table 2, for the following study activities: following lecturers, reading text books, writing essays, tutorial discussion, and talking to a tutor on the phone.

Table 2: scale for responses on command of English

1	Definitely insufficient
2	Insufficient
3	Barely sufficient
4	Sufficient
5	good

Study skills

The skills needed for distance learning are summarised in Ekins(9), the ones selected for this study were: organising your time to study; acquiring necessary background skills; studying efficiently; reading effectively; understanding concepts/theories, remembering concepts/theories; remembering facts; learning from audio tape; learning from video tapes; making notes; tackling assignments; revising effectively; and examination technique. Students were asked to rate their study skills, on a five point scale from very poor (1) to very good (5), 3 being OK.

The sample

Questionnaires were distributed in late 1990 to about 800 students and graduates of EAOI and 549 completed questionnaires were received by mid 1991.This sample was the basis of earlier research published in Ekins (7). From this sample, 450 were selected for this current study as being people who said that they always spoke Cantonese at home. Of these 8% were studying for a BA, 44% for a BBA and 47% for a BSc. The sample included students at all stages in their studies from those in their first year (19%) to graduates with an ordinary degree(18%) and honours graduates (2%).(an honours degree requires one more full time equivalent year of third level study than an ordinary degree). 38% of the sample had only studied to level 1(foundation), 22% had studied up to level 2 and 40% had studied up to level 3.

PREVIOUS RELEVANT RESEARCH FINDINGS

Student feedback on different media used in distance education collected by Ekins et al (10) suggested that students in the Hong Kong/Macau area find audio tapes less useful than other media and on certain courses e.g.the Open University mathematics foundation course, this is in contrast to their counterparts in the UK, for whom English is usually their first language. Video was also found to be less useful than written materials in this study.

In the research (7) on study processes, based on the EAOI SPQ sample, the following conclusions were drawn concerning student study approaches and three success factors: persistence in the system; credits gained and grades achieved. Deep motive increased and surface motivation decreased with increased persistence in the system. Deep motivation and achieving strategy increased with credits gained. Deep and achieving motivation and strategy all increased with better grades and surface motivation and strategy decreased. Hence deep motivation seems to be a key to success, but in order to succeed in gaining credits and good grades, deep strategy, achieving motive and achieving strategy are also needed. This research also showed that success in achieving credits and in gaining good grades was correlated with high ratings on the study skills

THE ANALYSIS

The analysis is divided into three parts: analysis of students' responses concerning the English language; analysis of student study approaches and study skills; and correlations between these two aspects.

English language

The students selected for the current project were studying in a second language and said that they always spoke Cantonese at home, but at tutorials only 29% spoke mostly or only in Cantonese. 46% spoke half in Cantonese and in half English, and 25% spoke mostly or only in English.

Students were also asked what language they would prefer to use in tutorials and surprisingly there was a tendency for them to want to use rather more English than they were currently doing. This is illustrated in Table 3.

Table 3: Tutorial language use and preference

(percentages of students giving each response)

	Only or mostly English	Half and half	Only or mostly Cantonese
Language used in tutorials	25%	46%	29%
Language preferred in tutorials	40%	45%	14%

Just over half the students (55%) said that Hong Kong Certificate of Education (ordinary level) was their highest English qualification, 26% had an advanced level English qualification, and 11% had a SAT,TOEFL or other English qualification . Because of the difficulty of ranking these qualifications, this latter group of students were excluded from the analysis of correlations involving the highest English qualification obtained.

20% of students said that they always or often translated what they read in English into their own language, an additional 21% said that they translate half the time and 41% did it occasionally. Only 18% said that they never translated into their first language. Hence 40% of students said they translated at least half the time! The highest English qualification was, not surprisingly correlated, with the frequency of translation into Cantonese. However surprisingly the correlation coefficient of -0.13 was only significant at the .05 level and was weaker than many other correlations in the analysis.

Students' rating of their own command of English showed that many felt it was insufficient or barely sufficient for some aspects of their studies, as shown in Table 4 .

Table 4: Command of English

Activity	Insufficient or definitely insufficient	Barely sufficient	Sufficient	Good
Follow lectures	5%	17%	51%	27%
Read text books	2%	12%	57%	28%
Write essays	9%	30%	47%	13%
Tutorial discussion	14%	34%	38%	14%
Talking to tutor on phone	17%	32%	36%	15%

These measures of command of English are correlated to the highest English qualification obtained. All correlation coefficients being significant at the .01 level. They are : 0.25 for following lectures; 0.20 for reading text books; 0.21 for writing essays; 0.19 for tutorial discussion; and 0.14 for talking to a tutor on the phone.

The students in the sample ranges from twenty to over fifty years in age. There was no apparent relationship between age and English qualifications, but there were significant correlations (at the .01 level) between age and all the above command of English ratings. Older students tended to rate themselves higher on all aspects (correlation coefficients were 0.21 for following lectures and tutorial discussion; 0.18 for reading text books, writing essays and phoning tutors.)

The most important activity in distance learning is reading and 86% of students rate their English as at least sufficiently competent in this respect (see Table 4). However good grades are also significantly correlated with the other aspects of English competency, as is shown in Table 5 but good grades are surprisingly not significantly correlated with highest English qualification (correlation coefficient -.06).

Table 5: Command of English correlated with higher grade

(all entries are significant at the .01 level)

Activity	**Correlation coefficient for increasing grade**
Follow lecture	.19
Read text books	.20
Write essays	.14
Tutorial discussion	.16
Talking to tutor on phone	.15

Study approaches and skills

The total sample mean of each of the SPQ scores are given in Table 6, together with the mean scores for students studying for different degrees. Note that the highest possible score for each scale is 35 (all items "true of me always") and the lowest possible score is 7 (all items "ever true of me"); the middle of each scale is 21 (equivalent to all items "true of me half the time").

Table 6: Mean scores on SPQ

			ALL	**BA**	**BBA**	**BSc**
	surface	(SM)	22	20	23	21
Motive	deep	(DM)	25	26	25	25
	achieving	(AM)	21	20	22	21
	surface	(SS)	20	19	20	20
Strategy	deep	(DS)	24	24	24	24
	achieving	(AS)	21	20	21	21

It can be seen that mean scores of the sample as a whole and for each degree programme are higher for deep motive and deep strategy than for the other dimensions

of motive and strategy . However achieving motivation and achieving strategy, which were shown to correlate with success in achieving higher grades in (7) are relatively low. So there is room for development of achieving approaches in many students. Older students tended to have higher scores on deep motivation deep and achieving strategy. The significant (at the .01 level) correlation coefficients are: 0.25 for deep motive; 0.14 for deep strategy; and 0.18 for achieving strategy).

Students rated their study skills on a five point scale: 1 being very poor; up to 5 being very good, with 3 being OK. Table 7 shows the percentage of students rating themselves as poor or very poor, OK, and good or very good on each skill. It also shows the mean rating for each skill. (Note that 1 is very poor, 3 is OK and 5 is very good)

Table 7: Mean ratings for study skills

Study skill	poor or very poor	OK	good or very good	mean rating
Organise study time	27%	49%	24%	3.0
Acquire background skills	13%	57%	30%	3.2
Study efficiently	12%	57%	31%	3.2
Understand concepts	5%	55%	40%	3.4
Remember concepts	17%	59%	24%	3.1
Remember facts	15%	59%	26%	3.1
Learn from audio tape	31%	51%	18%	2.8
Learn from video	28%	51%	21%	2.9
Make notes	24%	51%	25%	3.0
Tackle assignments	8%	57%	35%	3.4
Revise effectively	12%	58%	30%	3.2
Exam technique	17%	60%	24%	3.1

The figures suggest that a substantial proportion of students consider that some of their study skills are poor. nearly a third consider their skill at learning from audio tape to be poor or very poor. Learning from video, organising study time and making notes also have substantial proportions of students who rate their skills as poor. These students could surely benefit from help with improving their skills.

Correlations

Study approaches are not significantly correlated to the highest English qualification obtained. However command of English shows significant correlation with some study approaches, as is shown in Table 8. Thus those who have a better command of English (in particular for reading books and writing essays) are more likely to have the deep and achieving study approaches which are linked to success and less likely to have surface approaches which are not. The highest correlations being with achieving strategy. There is only one significant correlation between study approach and highest English qualification, namely achieving strategy (coefficient of .15**). So those with an achieving strategy are more likely to have gained a higher English qualification.

Table 8: Command of English correlated with study approaches

(*means entries are significant at .05 and ** means entries are significant at .01 level)

	Command of English				
Study approach	Follow lecture	Read books	Write essays	Tutorial discussion	Phone tutor
Surface Motivation	-.033	-.089	-.045	-.021	-.066
Deep Motivation	.15**	.19**	.20**	.14**	.093
Achieving Motivation	.13**	.13**	.13**	.096*	.076
Surface Strategy	-.07	-.07	-.004	-.10*	-.099*
Deep Strategy	.13**	.18**	.13**	.14**	.11**
Achieving Strategy	.18**	.22**	.22**	.20**	.13**

Earlier research (7) showed that successful students, in terms of credits gained and grades achieved rate themselves highly on study skills. These study skills ratings are significantly correlated to command of English, as is shown in Table 9.

However only a few study skills are significantly correlated to highest English qualification obtained as is shown in Table 10.

This suggests that those who have the study skills to organise their study time, revise effectively and have good exam technique are more likely to have passed higher English language qualifications. However those with these higher qualifications are not much more likely to possess the other study skills needed for successful distance learning.

Table 9: Command of English correlated with study skills rating

(all entries are significant at .01 level)

	Command of English				
Study skill	Follow lecture	Read books	Write essays	Tutorial discussion	Phone tutor
Organise study time	.21	.26	.17	.21	.15
Acquire background skills	.30	.33	.29	.30	.27
Study efficiently	.26	.36	.27	.26	.23
Understand concepts	.23	.35	.25	.24	.24
Remember facts	.18	.22	.23	.19	.19
Learn from audio tape	.24	.28	.14	.20	.20
Learn from video	.24	.28	.16	.19	.19
Make notes	.20	.21	.27	.21	.21
Tackle assignments	.13	.15	.14	.13	.13
Revise effectively	.21	.22	.24	.25	.25
Exam technique	.26	.28	.31	.23	.23

Table 10: Highest English qualification correlated with study skills rating

entries which are significant at the .05 significance level are denoted by one asterisk (*) and those which are significant at the .01 level by two (**).

Study skill	Highest English Qualification
Organise study time	.17**
Acquire background skills	.092
Study efficiently	.077
Understand concepts	.086
Remember concepts	.072
Remember facts	-.024
Learn from audio tape	.10
Learn from video	.088
Make notes	.085
Tackle assignments	.11*
Revise effectively	.16**
Exam technique	.21**

Development of study approaches and study skills

The above analysis shows that command of English is related to the study approaches and study skills which are likely to lead to success in persisting with one's studies, gaining credit and achieving high grades.

Although students with higher English language qualifications tended to have a more achieving strategy together with better time organisation, revision and examination skills, there is no evidence that they are more likely to possess the other study skills needed for distance learning. However student ratings on their own command of English show a stronger correlation with study skills and the study approaches likely to lead to success. Many students studying in a second language rate their study skills as poor or very poor and thus might benefit from teaching in this area.

There is some discussion as to whether study skills are best taught before the course starts or integrated into the course itself (see Ekins(9)) and whether they are best taught in isolation or within the specific academic contexts of a student's study. Few EAOI courses attempt to teach study skills or to change approaches to study within or before the course. They may aim to motivate intrinsically within academic contexts by making the subject interesting and to develop deep and achieving strategies by in text questions, problem books etc. However little concerted effort has been made to teach study skills or develop motivation or strategy either before or within academic programmes.

One exception is preparatory booklet (15) for the Mathematics Foundation course (Open University course M101), which almost all BSc students take. This course is offered by EAOI and the Hong Kong Open Learning Institute (HKOLI). It teaches study skills within the student's academic context before the course begins. It teaches organising time and study conditions; reading and studying mathematics textbooks effectively; making notes; writing mathematics; tackling assignments; learning from audio; and using a calculator. It has nothing on learning from video and little on revision/consolidation or exam technique. (The later are taught in face to face sessions within the course).This preparatory booklet was produced after the course had been running for a number of years and redresses a lack of study skills teaching

within the course itself. The course itself also makes little effort to relate new concepts to everyday situations which might help to develop deep strategies, although two recent internal surveys of UK M101 students (16) show that students would prefer more practical applications and examples from everyday life. The preparatory book does not redress the balance in this respect.

Another approach to developing appropriate study skills is in EAOI's recently developed short degree module on English skills (17). The course tries to combine improvement of students' command of the English language with their development of relevant study skills. The blocks are: studying independently in English; reading to learn and remember; listening; and writing. The course is designed to be taken as one of the first in a student's degree programme and so is an attempt to teach improve student study skills and command of English initially, rather than to develop these skills within specific academic contexts.

A similar approach has been adopted by HKOLI, which recently introduced a course entitled English for University Study (18) as part of its Western Arts and Humanities degree programme. This course is designed to improve students' command of English and develop some study approaches and skills which will improve their chances of success in their distance learning studies. It replaces a non-credit course in English for academic purposes. It is hoped that research on the the effectiveness of these initiatives will be a carried out in the future.

Conclusion

All the students in this study were studying in the English language, whilst speaking Cantonese at home. Many of these students felt that their competency in the English language was insufficient or barely sufficient for many study activities. Most felt their competency in reading and following lectures was sufficient or good, but it was insufficient or barely sufficient for writing essays, tutorial discussion or talking to their tutor on the phone. Older people and those with higher qualification in English tended to rate their English language competencies higher. Achievement of higher grades was significantly correlated with all the English language competencies, but surprisingly not with English qualifications. Those with higher qualifications tended to rate themselves higher on some but not all of the study skills needed for distance education. Hence high conventional English language qualifications is not sufficient for success in distance learning. Other skills need to be developed.

On average the EAOI distance learning students have deep motivation, as do many adult learners. However deep motivation alone is not sufficient to succeed in gaining credits and good grades.They are more likely to achieve success if they also develop appropriate deep and achieving strategies and study skills. Large numbers of students rated themselves as OK or below on many study skills.

The question is how best to help them improve their skills and study approaches. Study skills and approaches can be developed within academic contexts either before or within a course of study or it can be taught separately at the beginning of a programme. Both these approaches are currently being adopted in Hong Kong. Further research is needed to assess their impact.

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